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WHAT IS CLAIMED IS:

1. An image reading apparatus comprising:
a feed section which feeds originals one by one;
a reading section which reads an image on an
5 original fed from the feed section;
a storage section which stores image data read by
the reading section;
a first control section which executes a control
to feed the next original from the feed section, when
10 the image data of said original has been stored in the
storage section; and
a second control section which executes a control
to read out the image data from the storage section and
subject the read-out data to an encoding process, in
15 parallel with the control by the first control section,
and to store a result of the encoding process in the
storage section.
2. An image reading apparatus according to
claim 1, wherein said storage section is a hard disk
20 drive.
3. An image reading apparatus according to
claim 1, wherein the encoding process controlled by
the second control section is a JPEG encoding process.
4. An image reading apparatus comprising:
25 a reading section which reads an image on
an original;
a color conversion section which color-converts

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image data read by the reading section;

a process section which subjects the image data color-converted by the color conversion section to a sub-sampling process;

5 a storage section which stores the image data subjected to the sub-sampling process in said process section; and

a control section which executes a control to read out the image data from the storage section and subject
10 the read-out data to an encoding process, and to store a result of the encoding process in the storage section.

5. An image reading apparatus according to claim 4, wherein said color conversion section and said
15 process section are hardware processes.

6. An image reading apparatus according to claim 4, wherein the encoding process controlled by the control section is a software process.

7. An image reading apparatus according to claim 4, wherein a sub-sampling factor for the
20 sub-sampling process is selected in said process section.

8. An image reading apparatus comprising:
a reading section which reads an image on
25 an original;

a color conversion section which color-converts image data read by the reading section;

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a process section which subjects the image data color-converted by the color conversion section to a sub-sampling process;

5 a discrete cosine conversion section which subjects the image data sub-sampled by the process section to a discrete cosine conversion process;

a quantization section which quantizes the image data subjected to the discrete cosine conversion process by the discrete cosine conversion section;

10 a storage section which stores the image data quantized by the quantization section; and

a control section which executes a control to read out the image data from the storage section and subject the read-out data to an entropy encoding process, and
15 to store a result of the entropy encoding process in the storage section.

9. An image forming apparatus which reads an image on an original to form an image, comprising:

20 a selection section which selects one of an image forming mode and an image reading mode, which are executed by the image forming apparatus;

a reading section which reads an image on an original;

25 a conversion section which converts, when the image forming mode has been selected by the selection section, RGB signals read by the reading section as image data to YMC signals;

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a fixed-length encoding section which converts the image data of the YMC signals converted by the conversion section to fixed-length codes;

5 a first control section which executes, when the image reading mode has been selected by the selection section, a control to convert RGB signals read by the reading section as image data to YCbCr signals, and executes a control to subject the Cb and Cr signals of the converted YCbCr signals to a sub-sampling process
10 using the fixed-length encoding section;

a storage section which stores image data of the YCbCr signals controlled by the first control section; and

15 a second control section which executes a control to read out the image data from the storage section and subject the read-out data to a JPEG encoding process, and to store a result of the JPEG encoding process in the storage section.